

CLAIMS

What is claimed is:

1. A storage box for use with vehicles comprising:

a) a base structure;

b) a lid, pivotally connected to the base structure, shaped to enclose a portion of the base structure;

c) divider means, pivotally connected to the base structure, for dividing the storage box into two compartments for holding articles;

d) divider coupling means, connected to the divider means and the lid, for releasably coupling the divider means to the lid; and

e) lid coupling means, connected to the lid and the base structure, for releasably coupling the lid to the base structure, and having a first coupling position occurring when the lid is in an opened position.

2. The storage box of claim 1, wherein the lid coupling means comprises a lid latch coupled to the lid, and lid actuator means, rotatably coupled to the base structure, for engaging and latching the lid latch while in the first coupling, opened position.

3. The storage box of claim 2, wherein the lid actuator means comprises: a hooking cam for facilitating closing and securing the lid to the base structure, the hooking cam on the lid actuator engages the lid latch device while lid is in an opened position such that, as the lid actuator is rotated, the lid latching means tracks along the hooking cam of the lid actuator wherein the lid is pulled down, the lid being securely closed upon complete travel of the lid latch device along the hooking cam, the lid actuator means rotating substantially 180 degrees such that the lid latch is forced through cam action motion.

4. The storage box of claim 3, wherein the hooking cam comprises a hook, a cam, and a notch, wherein the notch is shaped and positioned to receive and retain the lid actuator when the lid is in a closed and secured position.

5. The storage box of claim 1, wherein the lid coupling means comprises a first and second lid actuator and a first and second lid latch.

6. The storage box of claim 5, wherein the first and second lid actuators are coupled together by a lid actuator connector for simultaneous operation of the first and second lid actuators.

structure, the divider and the lid, such that the lid and the divider pivot around the same axis.

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12. The storage box of claim 11, wherein the first and second divider actuators are coupled together by a divider actuator connector for simultaneous operation of the first and second divider actuators.

5 13. The storage box of claim 1, further comprising a single hinge connecting the base structure, the divider means and the lid, such that the lid and the divider means pivot around the same axis.

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14. A vehicle storage box comprising:

- a) a base structure;
- b) a lid, pivotally connected to the base structure, shaped to enclose the base structure;
- c) a divider, pivotally connected to the base structure, shaped to divide the storage box into two compartments for holding articles;
- d) a divider coupler, connected to the divider and the lid, shaped to releasably couple the divider means to the lid; and
- e) a lid coupler, connected to the lid and the base structure, shaped to releasably couple the lid to the base structure, the lid coupler having a first coupling position occurring when the lid is in an opened position.

15. The vehicle storage box of claim 14, wherein the lid coupler comprises a lid latch coupled to the lid, and a lid actuator, rotatably coupled to the base structure, for engaging and latching the lid latch while in the first coupling, opened position.

16. The vehicle storage box of claim 15, wherein the lid actuator comprises: a hooking cam for facilitating closing and securing the lid to the base structure, the hooking cam on the lid actuator engages the lid latch device while lid is in an opened position such that, as the lid actuator is rotated, the lid latch tracks along the hooking cam of the lid actuator wherein the lid is pulled down, the lid being securely closed upon complete travel of the lid latch device along the hooking cam, the lid actuator rotating substantially 180 degrees such that the lid latch is forced through cam action motion.

17. The storage box of claim 16, wherein the hooking cam comprises a hook, a cam, and a notch, wherein the notch is shaped and positioned to receive and retain the lid actuator when the lid is in a closed and secured position.

18. The vehicle storage box of claim 14, wherein the lid coupler comprises a first and second lid actuator and a first and second lid latch.

19. The vehicle storage box of claim 18, wherein the first and second lid actuators are coupled together by a lid actuator connector for simultaneous operation of the first and second lid actuators.

20. The vehicle storage box of claim 19, wherein the lid actuator connector comprises a cable and pulley system wherein a pulley is coupled to each of the lid actuators and connected by a cable, the pulley having a cable set screw positioned to engage and secure the cable in a fixed orientation and to allow for adjustment of the cable.

21. The vehicle storage box of claim 15, wherein the lid actuator is supported by a stabilizer attached to the base support and coupled to the lid actuator.

22. The vehicle storage box of claim 21, wherein the stabilizer is a threaded eyelet screw coupled to the lid actuator at the eyelet end and a bracket at the threaded end, the bracket attached to the base support.

23. The vehicle storage box of claim 18, wherein the first and second lid latches are substantially L-shaped members having a latching point for engaging respectively the first and second lid actuators.

24. The vehicle storage box of claim 14, wherein the divider coupler comprises a first and second divider actuator coupled to the lid and a first and second divider latch coupled to the divider.

25. The vehicle storage box of claim 24, wherein the first and second divider actuators are coupled together by a divider actuator connector for simultaneous operation of the first and second divider actuators.

5 26. The vehicle storage box of claim 14, further comprising a single hinge connecting the base structure, the divider and the lid, such that the lid and the divider pivot around the same axis.

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